2014 Maryland FMP Report (June 2015) Section 13. King Mackerel (*Scomberomorus cavalla*) and Spanish Mackerel (*Scomberomorus maculatus*)

Chesapeake Bay FMP

The Chesapeake Bay is nearing the northern limit of Spanish mackerel's range. This migratory species is usually only available during the warmer months, but is targeted by some recreational fishermen when available. Commercial and recreational harvest occurs in both Maryland and Virginia most years^{1, 2}. King mackerel are far less common visitors to Maryland's coastal waters.

The Chesapeake Bay and Atlantic Coast King and Spanish Mackerel Fishery Management Plan (K/SM FMP) was adopted in 1994. The plan follows the coastal management requirements. The K/SM FMP was reviewed in 2014 and determined to be an appropriate framework for managing mackerel in Maryland. The two species are managed jointly under the Atlantic States Marine Fisheries Commission's (ASMFC) 1990 FMP for Spanish Mackerel and the federal Coastal Migratory Pelagics (CMP) FMP adopted in 1983 by the South Atlantic Fishery Management Council (SAFMC) Since 1985, 21 amendments have been adopted by the SAFMC, one applied only to the Gulf of Mexico. Four amendments 20a, 20b, the South Atlantic CMP Framework Action 2013 and CMP Framework Amendment 1 were implemented in 2014. The amendments made changes to the allocation of commercial quotas, changes to at- sea transfer rules and an increase in the total allowable catch of Spanish mackerel. Framework Amendment 2 is currently under secretarial review. For specific details on each of the amendments, go to: http://www.safmc.net/Library/CoastalMigratoryPelagicsmackerel. Atlantic coastal states comply with the provisions of the 1990 Spanish mackerel ASMFC FMP, Omnibus Amendment 1 (2011) and Addendum I to the Omnibus Amendment (2013) by implementing creel limits, size limits and seasonal closures that closely mirror SAFMC CMP FMP requirements. To view ASMFC FMP documents, go to: http://www.asmfc.org/species/spanish-mackerel.

Stock Status

There is no formal stock assessment for either mackerel species in the Chesapeake Bay or along the mid-Atlantic coast. A stock assessment conducted by the Southeast Data, Assessment, and Review Process (SEDAR) in 2012 concluded that the Spanish mackerel stock along the entire US East Coast, is not overfished and overfishing is not occurring. The coastal stock was overfished in the 1980's and early 1990's, which led to harvest control regulations and a rebuilding of the depleted stocks. Management measures have been successful at rebuilding the Spanish mackerel stock. The ratio of biomass to Bmsy has been increasing. Based on the 2012 SEDAR stock assessment, the king mackerel stock along the US East Coast is not overfished and overfishing is not occurring.

Current Management Measures

The coastal annual catch limit (ACL) for Spanish mackerel was set at 6.063 million pounds under CMP Framework Amendment 1 to the federal FMP (2014). Fifty-five percent of the ACL is allocated to the coastal commercial fishery and 45% to the coastal recreational fishery. The commercial portion of the ACL was further divided, with 19.9% going to the northern fishing area and 80.1% to the southern fishing area in Amendment 20b (2014). The north-south split occurs at the SC-NC border.

The Chesapeake Bay states manage Spanish mackerel through size and creel limits as well as closures consistent with federal management measures. All states from New York to Florida implemented the requirements of the 2011 Omnibus Amendment for Spanish mackerel, Spot and Spotted Seatrout. Maryland and Virginia require a 14" minimum total length limit with a creel limit of 15 Spanish mackerel for recreational fishermen and a 3,500 pound per trip limit for commercial fishermen. The king mackerel size limit is 27" in Virginia with a creel limit of 3 fish for recreational fishermen in Virginia. Maryland has not developed regulations for king mackerel because they are rarely encountered in Maryland state waters. Commercial harvest reporting is required. Cull panels are used to reduce bycatch from pound nets set in the Potomac River by the Potomac River Fisheries Commission (PRFC). PRFC regulations for both species mirror those of Maryland.

Following public hearings, ASMFC approved an omnibus amendment for spot, seatrout and Spanish mackerel in August, 2011. The amendment includes an update to the coastal plan and includes commercial and recreational management measures and recommendations, adaptive management options, *de minimis* thresholds and exemptions, monitoring recommendations and requires each jurisdiction to submit an implementation plan and annual compliance report^{3, 4}. The amendment also requires recreational fishermen land their catch with the head and fins intact. Maryland changed its regulations in 2012 to comply with the omnibus amendment.

The Fisheries

In most years, the estimated recreational harvest of Spanish mackerel is greater in Virginia than in Maryland (Fig. 1). Catch estimates in the recreational fishery are imprecise with proportional standard errors in excess of 50 for most years in both Maryland and Virginia. In all years, commercial landings of Spanish mackerel from Virginia waters greatly exceed those from Maryland (Fig.2). Annual recreational landing estimates for king mackerel have been highly variable for both states, ranging form zero to 137,300 pounds in Virginia and zero to 47,000 pounds in Maryland. Over the past ten years, annual commercial landings for king mackerel have ranged from zero to 511 pounds in Virginia and zero to 249 pounds in Maryland.

Figure 1.

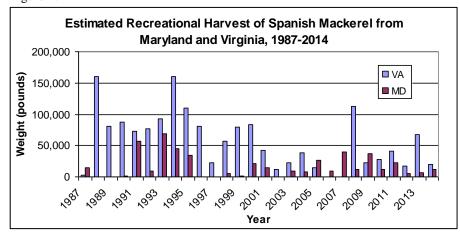
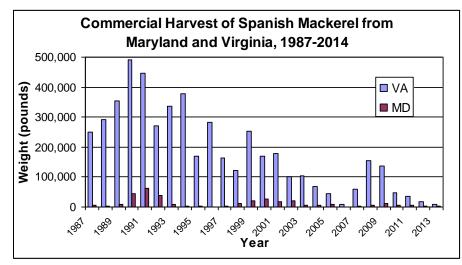


Figure 2.



Issues/Concerns

The 2014 Review of the ASMFC FMP for Spanish mackerel recommended additional research and monitoring. High priority recommendations included collecting basic fisheries data for better stock assessment accuracy; developing methods for fishery-independent monitoring; determining better estimates of recruitment, natural and fishing mortality rates and stock size; and implementing ecosystem-based management⁵.

References

- ¹ Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, Marine Recreational Information Program June 25, 2015.
- ² Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, commercial harvest query June 25, 2015.
- ³ 2012. Rickabaugh, H.W. Jr. Maryland's Plan for Implementing Requirements Pertaining to Spanish Mackerel within ASMFC's Omnibus Amendment for Spot, Spotted Seatrout, and Spanish Mackerel.
- ⁴ 2014. Rickabaugh, H.W. Jr. Maryland Spanish Mackerel (Scomberomorus maculatus) Compliance Report to the Atlantic States Marine Fisheries Commission 2013. September, 2014.
- ⁵ 2014 Review of the 1994 Chesapeake Bay and Atlantic Coast King and Spanish Mackerel Fishery Management Plan, Annapolis, MD July 2014.

Section	Action	Date	Comments
Stock Status	Action 1.1.1 A) Virginia will enforce a 14" TL minimum	1991	Minimum size and creel limits in place.
	size limit and a 10 fish/person/day bag limit for Spanish	Continue	Creel limit increased to 15 fish/person/day. VA
	mackerel.		implemented a 3,500 pound commercial limit in
			2012. Spanish mackerel must be landed with he
			and fins intact.
	Action 1.1.1 B) Maryland will enforce a 14" TL minimum	1993	Minimum size and creel limits in place.
	size limit for both the recreational and commercial fisheries	Continue	Creel limit increased to 15 fish/person/day.
	and a 10 fish/person/day bag limit for Spanish mackerel.		MD has a commercial limit of 3,500 pounds
			Spanish mackerel per vessel per day. MD
			implemented a 3500 pound commercial limit in
			2012. Spanish mackerel must be landed with he
			and fins intact.
	Action 1.1.2 A) Virginia will enforce a 5 fish/person/day	1991	Minimum size and creel limits in place.
	bag limit for king mackerel.	Continue	Creel limit reduced to 3 fish/person/day.
	Action 1.1.2 B) Maryland will enforce a 5 fish/person/day		MD has not developed regulations for king
	bag limit for king mackerel.		mackerel since most of the catch is outside state
			waters. Fishermen must abide by the limits
			imposed in the EEZ.
	Action 1.1.3. Virginia and Maryland will enforce a 20" FL		Minimum size limit of 27" established in VA.
	or 23" TL minimum size limit for king mackerel.		William Size mint of 27 established in 77.
	Action 1.1.4. Virginia and Maryland will close their	1995	Closures will be in compliance with South Atlan
	respective commercial and recreational fisheries for king		Fishery Management Council (SAFMC)
	and Spanish mackerel when such closures are in effect in		recommendations.
	Federal waters.		Totolimiciaations.
Ionitoring catch and	Action 2.1.1. Virginia and Maryland will require mandatory	Continue	Both states are in compliance with reporting
uotas, and research	reporting of commercial landings		requirements.
needs.			•
	Action 2.1.2. Virginia and Maryland will supplement the	Continue	Coastal charter boat logbook system was impro
	Marine Recreational Statistics Program. MD will require		in 1994. Improvements in estimating recreation
	charter boat logbooks.		harvest are in progress under the NOAA Marine
	Action 2.1.2 Inviodictions will assess to the accessory	Continue	Recreational Information Program (MRIP)
	Action 2.1.3. Jurisdictions will support stock assessment research for mackerel stocks.	Continue	VA samples Spanish mackerel for length and
	research for mackerel stocks.		weight. The ASMFC omnibus amendment was approved in 2011 and was implemented July 1,
			2012. The amendment includes monitoring and management recommendations. The most rece
			stock assessment for the south Atlantic stock
			Spanish mackerel was completed in December
			of 2012. A new King Mackerel Stock
			Assessment Report was completed in August
			2014 for South Atlantic and Gulf of Mexico.

1994 Chesapeake an	1994 Chesapeake and Atlantic Coast King and Spanish Mackerel Management Plan Implementation Table (update 06/14)				
Section	Action	Date	Comments		
Waste/sublegal bycatch and hook and release mortalities	Action 3.1.1. Virginia will evaluate the use of escape panels as a means of reducing undersized bycatch. VA will enforce a 2 7/8" minimum mesh size for gill nets.	Completed	VA conducted studies on escape panels in pound nets and found they were successful at reducing bycatch.		
	Action 3.1.2. Jurisdictions will support angler educational programs.	Continue	In 2008, Project FishSmart was organized by UMCES to develop a process for developing a consensus position on fisheries management options by a stakeholder group comprised of biologists, environmental organizations, tackle shop owners, charter boat operators, anglers, commercial fishermen, and tournament organizers. The pilot project species was King Mackerel and the goal of the project was to prevent overfishing and preserve a year-round fishery, with recommendations being adopted Nov 7, 2008. A report was submitted to the South Atlantic Fishery Management Council that recommended three options for consideration (UMCES, 2008), which were in its public scoping document.		
	Action 3.1.3. Virginia will monitor bycatch sold as crab bait from the pound net and haul seine fisheries.	1995			
Habitat Issues	Action 4.1.1. Jurisdictions will continue to work with the Chesapeake Bay Programs, the Coastal Bays initiative, and water quality improvement goals for the Bay and coastal areas.	Continue	The CBP completed a Chesapeake Bay Watershed Agreement in 2014, which sets new goals and outcomes for restoration and protection of the Chesapeake Bay and its watershed. A copy of the agreement can be found on the CBP website at http://www.chesapeakebay.net/documents/FINALChesBay Watershed Agreement.withsignatures-HIres.pdf The Agreement has fish habitat, forage fish, SAV and water quality outcomes that when reached will enhance habitat and prey availability for juvenile and adult Spanish mackerel.		

Acronyms:

ACL = Annual Catch Limit

ASMFC = Atlantic States Marine Fisheries Commission

CMP = Coastal Migratory Pelagics

CBP = Chesapeake Bay Program EEZ = Exclusive Economic Zone

PRFC = Potomac River Fisheries Commission

SAFMC = South Atlantic Fisheries Management Council SEDAR = South East Data, Assessment, and Review Process UMCES = University of Maryland Center for Environmental Studies